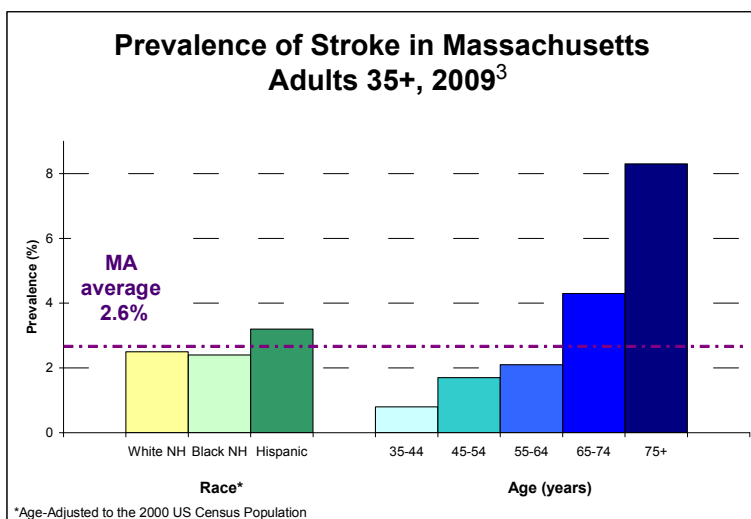
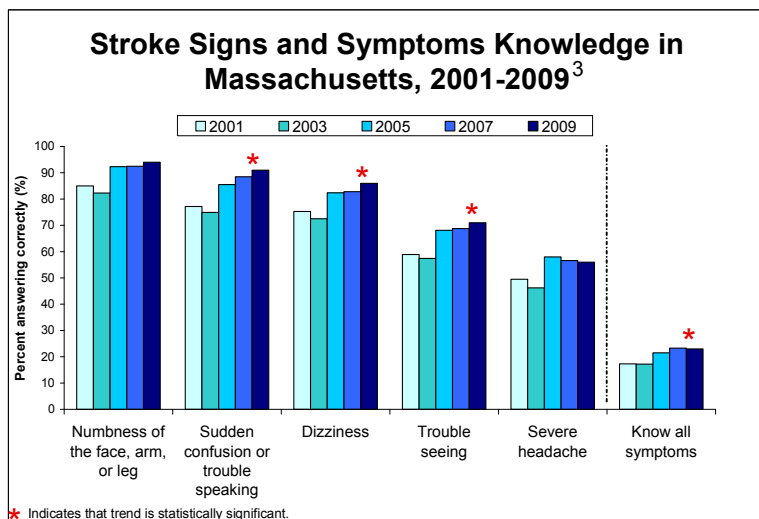
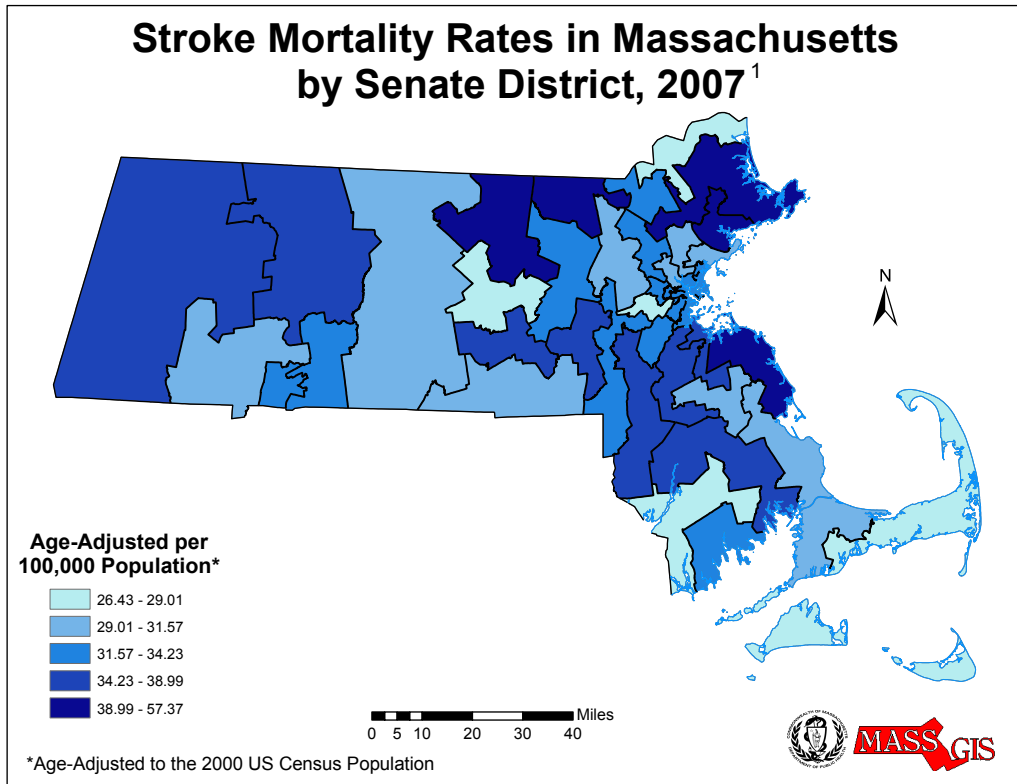


Impact of Stroke in Massachusetts | 2010

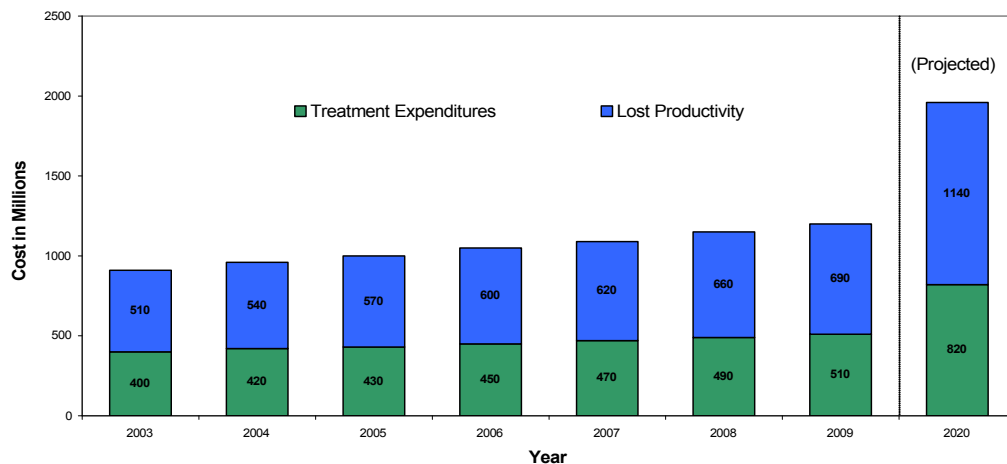


- Stroke is the third leading cause of death in Massachusetts¹ and the U.S.
- Each year, stroke causes nearly 3,000 deaths and 18,500 hospitalizations in the state of Massachusetts.^{1,2}
- Approximately 3% of Massachusetts adults report ever having a stroke, with the elderly and Hispanics being disproportionately affected.³
- The **FAST** campaign, which teaches the observable stroke signs using the mnemonic Face, Arm, Speech, Time, is available in **English, Spanish, Portuguese, and Khmer**. Over 600,000 education materials have been distributed to Massachusetts residents and organizations.
- Knowledge and awareness of stroke signs and symptoms and the willingness to call 9-1-1 has increased significantly since 2001.



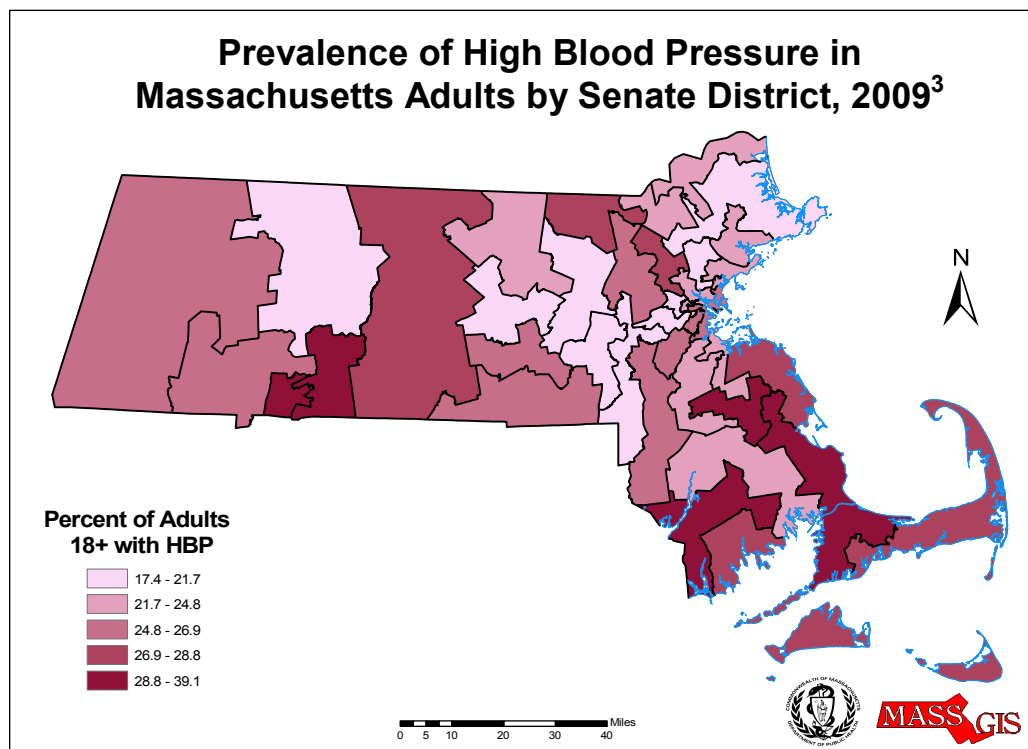
Estimated Direct and Indirect Costs of Stroke in Massachusetts, 2003-2009, 2020⁴

Stroke is a leading cause of disability in Massachusetts and results in two substantial sources of economic burden: clinical treatment costs and lost productivity dollars. In 2009 alone, these costs reached 1.2 billion dollars and are expected to increase to almost 2 billion dollars by 2020.

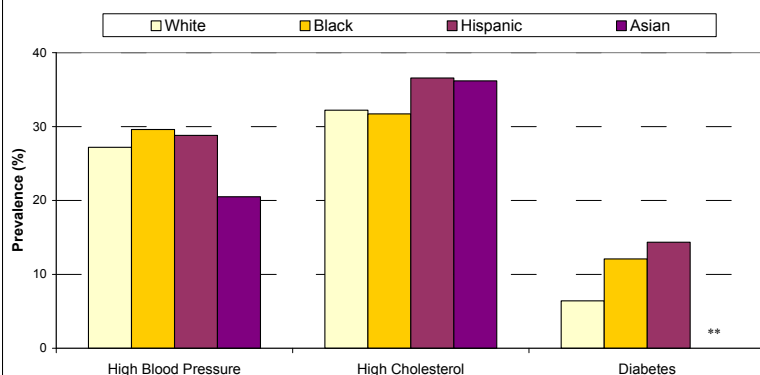


Prevent Stroke | Control Risk Factors

- 32% of Massachusetts adults over 18 have been diagnosed with high cholesterol, 25% with high blood pressure, and 8% with diabetes. 47% do not exercise regularly.³
- High blood pressure is the number one controllable risk factor for stroke and one-third of people with high blood pressure are not aware they have it.⁵
- Of those diagnosed, 75% report taking medicine for their high blood pressure; however, 29% of MA adults still have uncontrolled blood pressure.^{3,6}
- The prevalence of these controllable risk factors for stroke increases significantly with age.

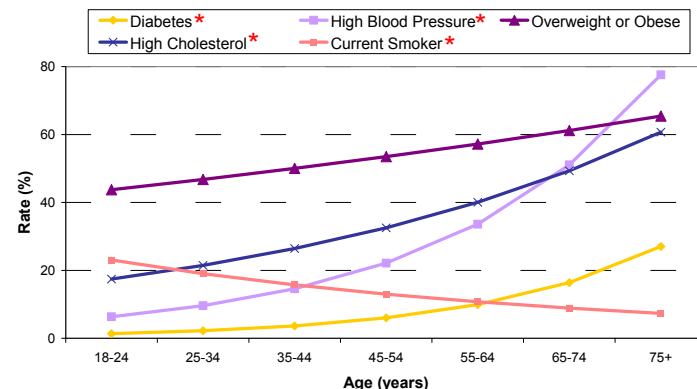


Prevalence of Risk Factors* in Massachusetts Adults 18+, 2009³



* Age-Adjusted to the 2000 US Census Population
 ** Data Suppressed due to Insufficient Numbers

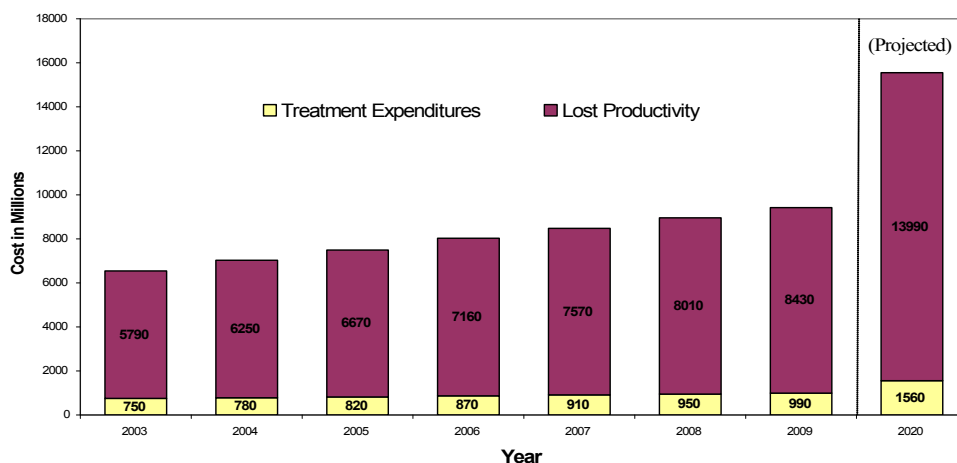
Controllable Risk Factors for Stroke in Massachusetts Adults by Age, 2009³



* Indicates statistical significance.

Estimated Direct and Indirect Costs of HBP in Massachusetts, 2003-2009, 2020⁴

While the cost of treating high blood pressure is relatively low, lost productivity due to the disease cost Massachusetts 8.4 billion dollars in 2009. This number is expected to rise to almost 14 billion by 2020. Controlling high blood pressure and other risk factors is a priority to decrease the costs of diseases.



¹ Massachusetts Department of Public Health. Massachusetts Vital Records 2007. *Bureau of Health Information, Statistics, Research and Evaluation*, ed; 2008

² Massachusetts Division of Health Care Finance and Policy. *Inpatient Hospital Case Mix and Charge Data*, Fiscal Year 2008.

³ Massachusetts Department of Public Health. Behavioral Risk Factor Surveillance System Data. (MBRFSS) *Bureau of Health Information, Statistics, Research and Evaluation*. 2001-2009.

⁴ Milken Institute. An Unhealthy America: The Economic Burden of Chronic Disease. Website: <http://www.chronicdiseaseimpact.com/ebcd taf?cat=disease&TimeType=stroke>

⁵ Hyman DJ, Pavlik VN. Characteristics of Patients with Uncontrolled Hypertension in the United States. *NEJM*. 2001. 345:7 p.479-486

⁶ Massachusetts Health Quality Partners. Quality Insights: Clinical Quality in Primary Care. 2009. Website: <http://www.mhqp.org/quality/clinical/cqMASumm.asp?nav=032400>